

**REMARKS**

By this amendment, claims 11, 19, and 21 have been amended, claims 4 and 13 stand withdrawn, and claims 6, 7, 15, and 16 have been cancelled without prejudice or disclaimer. The specification has been amended to correct certain informalities with respect to Government contract information. Accordingly, claims 2-3, 5, 8-12, 14, 17-22 are currently under examination, of which claims 19 and 21 are independent claims. Applicant respectfully submits that the above amendments do not add new matter to the application and are fully supported by the specification.

In view of the above amendments and the following Remarks, Applicants respectfully request reconsideration and timely withdrawal of the pending rejections for the reasons discussed below.

***Allowable Subject Matter***

Applicant appreciates the indication that claims 9 and 18 would be allowable if rewritten to overcome the rejection under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph. Applicants note that there are no pending rejections under 35 U.S.C. § 112, 2<sup>nd</sup> paragraph identified in this Office Action. The Office Action indicates that all art rejections and claim objections have been withdrawn. See paragraphs 1 and 2 on page 2 of the Office Action.

Applicants further acknowledge and appreciate the indication of allowable subject matter from the Examiner that:

One of skilled in the art would not be motivated to replace the fiber reinforced matrix composite with metal for the core of the structural composite sandwich from the impractical view of weight concern and cost increasing (see Dumlao column 3, lines 40-52). Similarly it would not have been obvious to substitute the metal matrix composite for the fiber reinforced polymer of the facesheet because to do so would defeat the purposes of providing light weight and low cost.

Office Action, page 3, paragraph 6.

Applicant has amended claims 19 and 21 such that the composite stiffening material comprises a metal matrix composite.

***Rejections Under 35 U.S.C. §102***

Claims 2, 5, 6, 10, 11, 14, 15, 19, and 21 stand rejected under 35 U.S.C. §102(b) as being anticipated by over U. S. Patent No. 6,092,350 issued to Dumlao, *et al.* (“Dumlao”). Further, Claims 2, 3, 5-8, 10-12, 14-17, and 19-22 stand rejected under 35 U.S.C. §102(b) as being anticipated by over U. S. Patent No. 5,240,067 issued to Hatch (“Hatch”). Applicant respectfully traverses these rejections for at least the following reasons.

Independent claims 19 and 21 have been amended such that the composite stiffening material comprises a metal matrix composite. Dumlao fails to disclose, teach or suggest the use of a metal matrix composite material as the composite stiffening material as recited in claims 19 and 21. As indicated by the Examiner, “[o]ne of skilled in the art would not be motivated to

replace the fiber reinforced matrix composite with metal for the core of the structural composite sandwich from the impractical view of weight concern and cost increasing (see Dumblao column 3, lines 40-52).” Office Action, page 3, paragraph 6. Accordingly, Applicant respectfully submits that claims 19 and 21 are not anticipated by Dumlao.

Further, Hatch fails to disclose, teach or suggest the use of a metal matrix composite material as the composite stiffening material as recited in claims 19 and 21. As recognized by the Examiner, “[t]heir is no motivation to add ceramic fibers or ceramic particles in the cladding material of the extruded product of Hatch.” Office Action, page 3, paragraph 6. Accordingly, Applicants respectfully submit that the use of metal matrix composites as the composite stiffening material as recited in claims 19 and 21 is not anticipated by Hatch. Accordingly, Applicant respectfully submits that claims 19 and 21 are not anticipated by Hatch.

Applicant respectfully submits that claims 19 and 21, and all the claims that depend therefrom, are not anticipated by Dumlao or Hatch and are in condition for allowance. Accordingly Applicant respectfully requests withdrawal of the 35 U.S.C. §102(b) rejections.

**CONCLUSION**

Applicant believes that a full and complete response has been made to the pending Office Action and respectfully submits that all of the stated objections and grounds for rejection have been overcome or rendered moot. Accordingly, Applicant respectfully submits that all pending claims are allowable and that the application is in condition for allowance.

Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the Applicant's undersigned representative at the number below to expedite prosecution.

Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,



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